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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/495,175	02/01/2000	Ana Belen Benitez	2000-0025	4490

7590

05/22/2003

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EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

10

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

3.11

Office Action Summary	Application No. 09/495,175	Applicant(s) BENITEZ ET AL.	
	Examiner B. Prieto	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to amendment filed 03/24/03, claims 1-24 have been cancelled, currently claims 25-53 remain pending, these are hereby set forth for examination.

Claim Rejections - 35 USC § 103

2. Quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.

3. Claims 25-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan et. al. (Sezan) MPEG-7 Standardization Activities in view of Bergman et. al. (Bergman) U.S. Patent No. 6,564,263 B1.

Regarding claim 25, Sezan teaches features of the invention substantially as claimed, teaching a system/method comprising:

identifying multimedia categories (types) from received multimedia contents (introduction section, page 517);

extracting multimedia objects to generate multimedia object descriptions from the multimedia content for a multimedia (type) (feature extraction, page 518, descriptors section page 518, Fig. 1, description generation);

generating, from the multimedia object descriptions (description, page 518), an entity relationship representation (graph descriptions) for a multimedia type (features hierarchy section, page 519); and

however prior art does not explicitly teach integrating the multimedia object descriptions and entity relation graph descriptions to generate a description record to represent content embedded within the multimedia content;

aggregating, incorporating or combining, i.e. integrating from the multimedia object descriptions (col 12/lines 17-26), entity relation graph descriptions (col 3/lines 27-36, 46-51, 59-62, Figs. 3-7, col 4/lines 20-30, integrated multimedia descriptions and entity relationships descriptions: col 6/lines 57-64, col 8/lines 42-67, entity-relationships, col 9/lines 55-col 10/line 10) to generate a composite object ("description record");

wherein a composite object supports embedding of multimedia contents (col 7/lines 2-6, embedded hyper-linking, col 15/lines 4-17, spatial relationship of object within/contained, col 17/lines 10-19, object within another object, col 17/lines 49-52); additionally teaching

identifying multimedia type or modalities in multimedia content (col 3/lines 21-36, description data type, col 12/lines 23-64, select identified type: col 19/lines 41-49);

capture (extract) multimedia object features, attributes or modalities from multimedia objects to form multimedia object descriptions and entity relation descriptions from the multimedia object (col 3/lines 37-51, col 6/lines 39-43, extract: col 19/lines 54-58);

generating entity relationships descriptions and multimedia object descriptions from a multimedia category, type or modality (develop: col 14/lines 44-48, create: col 12/lines 43-50, generate: col 19/lines 50-53);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include Bergman's teachings for aggregating, incorporating or combining, i.e. integrating the multimedia object descriptions and their respective entity relation graph descriptions to generate a description record to represent content embedded within the multimedia content, motivation would be to generate entity relation description based on the multimedia object descriptions for multiple multimedia content types including a composite multimedia object description that represents content embedded within the multimedia content, as taught by Bergman.

Regarding claim 26, multimedia object pyramid (hierarchy) descriptions for one of the multimedia types (Figs. 3-4 & 8, hierarchical model of multimedia object descriptions based on content type; col 8/lines 12-16, 20-67, Sezan: feature hierarchy, page 519).

Regarding claim 27, the multimedia types includes image (Sezan: media type, page 519).

Regarding claim 28, separating (segmenting) each multimedia content into descriptor defining portions (segments) including content from one of the multimedia type for the multimedia content (Sezan; page 518); and

generating one feature representing a feature for one of the portions by feature extraction and annotation (Bergman: feature description: col 8/lines 42-46, annotation: col 8/lines 55-58, extraction col 3/lines 37-51);

wherein the generated multimedia object descriptions comprises one feature description for one segment (Bergman; col 8/lines 20-41).

Regarding claim 29, wherein the segments are selected from the group consisting of local segments and global segments (Bergman: col 8/lines 55-58).

Regarding claim 30, feature description from the group consisting of media, semantic and temporal features (Bergman: col 8/lines 42-67).

Regarding claim 31, a feature description selected from the group consisting of data location, scalable representation and modality transcoding (Bergman: col 9/lines 25-37).

Regarding claim 32, wherein the semantic features are further defined by one feature description selected from the group consisting who (Bergman: col 8/lines 47-50).

Regarding claim 33, temporal features are further defined by one feature description consisting of duration (Bergman: objects duration, col 16/lines 16-34).

Regarding claim 34,

generating media object descriptions from the multimedia segment for one of the multimedia types by media object extraction processing (Sezan: feature extraction, page 518, descriptors section page 518, Fig. 1, description generation, Bergman: capture (extract) multimedia object features, col 3/lines 37-51);

generating media object hierarchy descriptions from the generated media object descriptions by object hierarchy construction and extraction processing (Bergman: col 14/lines 44-48; Sezan: description, page 518, features hierarchy section, page 519); and

generating media entity relation graph descriptions from the generated media object descriptions by entity relation graph generation processing (Bergman: col 3/lines 27-36, 46-51, 59-62, Figs. 3-7, col 4/lines 20-30, col 6/lines 57-64, col 8/lines 42-67, entity-relationships, col 9/lines 55-col 10/line 10).

Regarding claim 35, segmenting the content of each multimedia type in the multimedia object into segments within the multimedia object by media segmentation processing (Bergman: col 3/lines 21-36, col 12/lines 23-64; Sezan: categories (types) introduction section, page 517);

generating one feature description for one of the segments by feature extraction and annotation (Bergman: feature description: col 8/lines 42-46, annotation: col 8/lines 55-58, extraction col 3/lines 37-51);

wherein the generated media object descriptions comprise the feature description for one of the segments (Bergman; col 8/lines 20-41).

Regarding claim 36, substantially the same as claim 30, same rationale of rejection is applicable.

Regarding claims 37-40, wherein generating media object pyramid (hierarchy) descriptions generates terminal/composite objects define as multimedia content pyramid (hierarchy) descriptions of the media object descriptions (Bergman: col 3/lines 27-36) based on relationships of media objects represented by the media object descriptions (Bergman: col 3/lines 41-51), and wherein the relationships consisting of media feature relationships, semantic feature relationships, temporal feature relationships, and spatial feature relationships (Bergman: col 6/line 1-14, 57-67, col 7/lines 10-14, 20-25).

Regarding claims 41 and 46, wherein generating media entity relation graph descriptions (Bergman: col 9/lines 55-col 10/line 10) generates entity relations graph descriptions of the media object descriptions based on entity-relationships and dependency-entity relationships of media objects represented by the media object descriptions (Bergman: col 14/lines 45-48, col 19/lines 50-53),

wherein the relationships are selected from the group consisting of media feature relationships, semantic feature relationships, temporal feature relationships and spatial feature relationships (Bergman: col 6/lines 1-14, 57-67, col 7/lines 10-14, 20-25).

Regarding claims 42-45, wherein generating multimedia object pyramid (hierarchy) descriptions generates multimedia object hierarchy descriptions of the multimedia object descriptions based on media content relationships of multimedia terminal/composite objects represented by the multimedia object descriptions (Bergman: col 11/line 27-33, inter-feature relationships: col 19/lines 50-53, inter-object relationships, col 15/lines 10-15); based on temporal, spatial feature relationships of multimedia objects (Bergman: col 15/lines 10-15); and semantic feature relationships of multimedia object (Bergman: col 6/lines 58-64).

Regarding claim 47, receiving (Sezan: page 517) and transcoding (encoding) the multimedia object descriptions into encoded description information (Bergman: col 7/lines 20-24), and storing the encoded description information as one (description) record (Sezan: left column, page 518).

Regarding claim 48, this claim combines limitation(s) substantially the same as claims 25, and 47, same rationale of rejection is applicable

Regarding claim 49 & 50, the encoding comprises binary encoding (Bergman: col 13/lines 31-33).

Regarding claims 51 & 52, the encoding comprises the extensible Markup Language (XML) encoding (Bergman: col 14/lines 4-18).

Regarding claim 53, includes limitations substantially the same as claim 25, same rationale of rejection is applicable, and further

generating, from the multimedia object descriptions, multimedia object pyramid (hierarchy) descriptions (Bergman: generating entity relationships descriptions and multimedia object descriptions from a multimedia category, type or modality develop: col 14/lines 44-48, create: col 12/lines 43-50, generate: col 19/lines 50-53) by object hierarchy construction and extraction processing, for a multimedia content modality or feature (type) (extract: col 3/lines 41-51, col 6/lines 39-42, construct: col 12/lines 43-50); and

integrating the multimedia object descriptions and the multimedia object pyramid (hierarchy) descriptions to generate a descriptor (description record) to represent content embedded within the multimedia content (Bergman: integration, col 12/lines 17-26, entity relation graph descriptions, col 3/lines 27-36, 46-51, 59-62, Figs. 3-7, col 4/lines 20-30, integrated multimedia descriptions and entity relationships descriptions: col 6/lines 57-64, col 8/lines 42-67, entity-relationships, col 9/lines 55-col 10/line 10) to generate a composite object);

wherein a composite object supports embedding of multimedia contents (col 7/lines 2-6, embedded hyper-linking, col 15/lines 4-17, spatial relationship of object within/contained, col 17/lines 10-19, object within another object, col 17/lines 49-52).

Response to argument

4. Applicant traverses previous rejection on the basis that the prior does not teach new claim limitations specifically, integrating the multimedia object descriptions and the entity graph descriptions to generate a “description record” (information, data, object or descriptor) to represent “content embedded” within the multimedia content.

5. Applicant's arguments with respect to claim 25-53 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Prosecution of this application is closed by means of this final office action § 1.113, applicant may request continued examination of the application by filing a Request for Continued Examination of under 37 CFR § 1.114 and providing the corresponding fee set forth in § 1.17(e) for the submission of, but not limited to, new arguments, an information disclosure statement, an amendment to the written description, claims, drawings, or new evidence in support of patentability. Or applicant whose claims has been twice rejected, may appeal from the decision of the administrative patent judge to the Board of Patent Appeals and Interferences under 35 U.S.C. §134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark R. Powell can be reached on (703) 305-9703. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this final action should be mailed to:

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or Telephone:

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington.
VA., Sixth Floor (Receptionist).


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